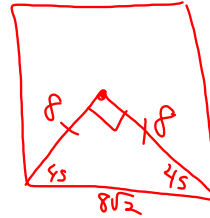
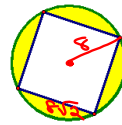


# 11-3 Continued Shaded Regions

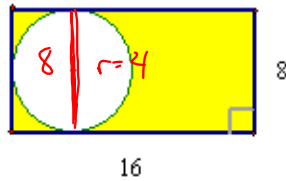
Find the area of the shaded region.  
The radius is 8 cm.



$$A_{\text{circle}} - A_{\text{sq}} \\ 64\pi - (8\sqrt{2})^2 \\ \approx 73.1 \text{ u}^2$$

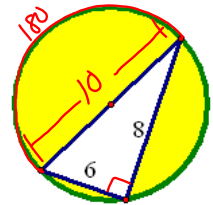
Example 1:  
Find the area of the shaded region.

$$A_{\text{rect}} - A_{\text{circle}} \\ 16 \cdot 8 - 16\pi \\ \approx 77.7 \text{ u}^2$$



Example 2:  
Find the area of the shaded region.

$$6^2 + 8^2 = \text{diam}^2 \\ 10 = \text{diam} \\ A_{\text{cir}} - A_{\Delta} \\ 25\pi - \frac{1}{2}6 \cdot 8 \\ \approx 54.5 \text{ u}^2$$



Example 3:  
Find the area of the shaded region.

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 $r = 8$

$$A_{\text{B.C}} + A_{\text{sc.}} - A_{\Delta} \\ 64\pi + 16\pi - \frac{(8\sqrt{3})^2 \sqrt{3}}{4} \\ 80\pi - 48\sqrt{3} \\ \approx 168.2 \text{ u}^2$$